



Yes They Can: Special Needs Students and 21st Century Literacies



Between the Ideal and the Real World of Teaching

Ideas for the Classroom from the NCTE Elementary Section

Andrea García and Frank Chiki, Coeditors

Note from the Editors

All of us have special needs students in our schools. As part of our learning communities, they are capable of demonstrating all their strengths when they have educators who facilitate and scaffold their learning in new and innovative ways.

In this issue, we invited four authors to share their stories of providing opportunities for special needs students to access curriculum using digital literacy tools. A teacher educator preparing special education teachers discusses the Center for Applied Special Technology (CAST) and their projects that use Universal Design for Learning (UDL). Two teachers who work with a wide range of grade levels describe how ThinkQuest, a Web-based program available for K–12 students, provides a forum for students to find their inner voices to share with the world. And our final author tells her story of coming to terms with 21st century literacies before they even had a name.

We hope that some of the techniques, strategies, and tools discussed in this issue will help you lift all of our students' educational processes and experiences.

We invite you to share your success stories with us. We'll try to put as many as we can on our Elementary Section website.

Happy Spring, everyone!

Frank and Andrea

UDL: Paving the Way toward 21st Century Literacies for Special Needs Learners

Elfreda V. Blue, Hofstra University

The 21st century has become a time of promise for learners with special needs. Federal legislation such as the No Child Left Behind Act and the Individuals with Disabilities Education Improvement Act (IDEIA) of 2004 has paved the way for unprecedented access to standards-based learning and instruction in general education settings. And with 21st century literacy tools, learners with special needs can be afforded the opportunity to develop technological know-how and demonstrate effective communication, social, and problem-solving skills with teachers and peers (NCTE, 2008).

The effort to expose learners with special needs to 21st century literacy tools comes at a time when researchers at the Center for Applied Special Technology (CAST) are encouraging teachers to incorporate Universal Design for Learning (UDL) into their classrooms (CAST, 2008). Inspired by universal design in architecture, Universal Design for Learning is an instructional framework for implementing flexible and supportive curricula, which calls for instruction and learning experiences

designed with all students in mind (Rose & Meyer, 2002). It can be an effective medium for paving the way for special needs learners to move toward 21st century literacies by affording them opportunities to use technology to solve problems; to promote creativity and collaboration; and to analyze, critique, and synthesize multimedia texts.

UDL addresses the diverse needs of all learners by providing academic support for students with specific needs while making these supports available to everyone. It stresses the need for multiple approaches to accommodate diverse learning styles. UDL accomplishes this by “fixing” the curriculum, not the learner. The assumption is that the curriculum is “disabled,” as it is often limited in terms of whom it can teach, what it can teach,



UDL: Paving the Way toward 21st Century Literacies for Special Needs Learners

(continued from page 1)



and how it can teach students with diverse needs.

UDL and 21st Century Literacies

A major goal of UDL is to develop “expert learners” through 21st century literacies so as to prepare students for the current and future demands of the workplace. Preparation for tomorrow’s workplace can begin now as teachers make room for real-world technological applications for special needs learners. That is, with the growing digital demands on all learners, special needs students should have plenty of opportunities to become proficient with such technologies to enhance their learning.

UDL Guidelines—Version 1 (2009) provide specific suggestions for incorporating multiple means of representation, engagement, and expression into the classroom:

Representation—perception, language and symbols, and comprehension

Engagement—recruiting interest, sustaining effort and persistence, and self-regulation

Expression—physical action, expressive skills and fluency, and executive function

Each guideline has multiple checkpoints, with links to user-friendly

examples and resources ready for immediate use. Teachers may easily access the “Examples and Resources” associated with each guideline.

Teachers can facilitate students’ action-oriented learning by using audio and visual resources (see the UDL Free Technology Toolkit and TeacherTube). For example, students with hearing impairments may benefit from video presentations with closed captions, but closed captioning is also useful for students who find it challenging to concentrate, because it may help keep them focused. Students with visual impairments may benefit from audio files or digital recordings as learning tools (as heard, for example, via podcasts or on iPods or other mp3 players).

Real Life Applications of UDL and 21st Century Literacies

Some students with special needs find it challenging to use traditional classroom tools such as pens, rulers, and markers. However, technology tools can foster various learning experiences, which may result in students’ using graphic organizers, writing samples, digital video, dramatizations, and oral presentations. The challenge facing many students with special needs is access to flexible technology options (Pisha &

Stahl, 2005). These should be readily available in 21st century classrooms. However, without UDL applications, special learners may have only limited access to 21st century literacies.

One flexible technology option for literacy learners is online digital books, available through the Library of Congress, Project Gutenberg, and local libraries. Formats include audio files, online text, and video streams of readers with music, book text, and closed captioning. One helpful resource is Storyline Online, where picture book readers can listen, watch, or read along as professional actors make classic picture books come alive. Learners who are challenged by reading may watch and listen to the expert reader, those who face vision challenges can hear the story, and learners who face hearing challenges may read the closed captioning. Each of these options is readily available to all readers. And after reading, there are activities that can be downloaded and accessed through class computers.

Another flexible online literacy support tool is UDL Editions, a product of CAST. This website provides different scaffolds for learners reading any one of seven classic texts in a digital environment. After choosing a text to read,



Online Resources

Digital Citizenship in Education. <http://digiteen.wikispaces.com/>
Free Technology Toolkit for UDL in All Classrooms.

<http://udltechtoolkit.wikispaces.com/>

Library of Congress eBooks. <http://www.ebookmall.com/alpha-authors/l-authors/Library-of-Congress.htm>

National Center on Universal Design for Learning. <http://www.udlcenter.org/>

Noodle Tools’ Teacher Resources. <http://www.noodletools.com/debbie/literacies/>

Project Gutenberg. http://www.gutenberg.org/wiki/Main_Page

Storyline Online. <http://www.storylineonline.net/>

TeacherTube. www.teachertube.com

UDL Editions. <http://udleditions.cast.org/>

UDL Guidelines—Version 1. <http://www.udlcenter.org/aboutudl/udlguidelines>

UDL Guidelines—Version 1 Examples and Resources.

<http://www.udlcenter.org/aboutudl/udlguidelines/examples>

As students become more proficient with technology, the products of their learning may become more sophisticated and their activity more collaborative and global.

readers can decide the level of literacy support they want, then begin reading. A text-help toolbar provides text-to-speech support and a glossary with definitions available both audibly and through text. Learners can click on the strategies-and-resources link to access literacy strategies as well as Web resources and information about the author's craft. UDL Editions provides support for all learners, including those facing vision, hearing, and cognitive challenges.

An even more flexible online resource is Digiteen, a digital curriculum which links middle school students in four hemispheres with the goal of "online citizenship through research and discussion" (CAST, 2009). On Digiteen, students can collaborate, use multiple media, manage information and resources, and decide how to teach digital citizenship. Both typical and special learners can select options, make decisions, and navigate resources, accessing information through text, audio, and video (UDL).

Connecting UDL with 21st century literacies can afford all learners opportunities to flexibly use tools of technology to solve problems, analyze, critique, and synthesize multimedia text in ways that prepare them for the workplace today and position them to take advantage of emerging technologies that will shape tomorrow.

As students become more proficient with technology, the products of their learning may become more sophisticated and their activity more collaborative and global. The role of the teacher remains key, however. While providing flexible opportunities, teachers are encouraged to consider students' varied abilities, interests, and preferences in order to fully engage them with their learning. UDL and 21st century literacies will not replace the teacher, but they are essential tools for effective teaching and learning. ▲

21st Century Learning for All: Online Learning and Students with Special Needs

Kristi Back and Carrie Gaffney, Center for Inquiry at School 2, Indianapolis, Indiana

Brenden's hand waves frantically in the air. I have just finished assigning some reading questions on the Langston Hughes poem "Harlem Night Song" for homework. "Mrs. Gaffney, can I post these on my Think page instead of writing?"

I nod. "I don't care if they're handwritten or posted on Think; just get them done before you are in this seat tomorrow."

Welcome to reading and writing instruction in the age of 21st century literacy.

Brenden is an eighth-grade student with Asperger's Syndrome. Like many students with Asperger's, Brenden has difficulties with his handwriting, and his participation in class discussion is reluctant. Getting him to put initial thoughts on paper is challenging, as is the revision process. He does not function well in the small settings of writing conferences or in group sharing. Although extremely bright, he does not pick up on the social and intellectual norms of the classroom, often leaving him frustrated with his classmates and with the content itself. On most assignments, he requires heavy interventions from Ms. Back, the special education inclusion teacher on our team. The two of us have worked tirelessly in search of ways to improve Brenden's ability to share and collaborate, thus increasing his potential for achievement.

Enter Think.

ThinkQuest.org, a branch of the Oracle Education Foundation, is a protected, online learning environment where students and teachers collaborate on Web-based projects. ThinkQuest is a free service to all schools serving students K–12. On ThinkQuest, each student creates and maintains his or her own page and is completely accountable for all of its content. Students are free to post school-related documents, surveys, and video and audio presentations. They also use their ThinkQuest pages to make friends from schools in other states and countries. Teachers use ThinkQuest to post projects, monitor student progress, and even provide individual feedback on student work.

In order to register for ThinkQuest, teachers and administrators must have an active K–12 email address. This ensures that students interact online only with students in other educational settings. Posts from student to student are public, and all uploaded photos or videos must be approved by a school-based site administrator to remain on a student's page. Any teacher worldwide may flag a student's page for inappropriate content. Any student who abuses ThinkQuest is required to take an Internet safety quiz before he or she may log in again. ThinkQuest also reserves the right to deactivate and remove a student's page at any time if there is perceived ongoing or flagrant abuse by the child.

For Brenden and other students with special needs in our classrooms, ThinkQuest has become vital for academic success. Recently, Brenden completed a poetry portfolio in which he was required to write multiple drafts of poems in seven different subgenres. With his struggles with penmanship and motivation, and his reluctance to receive face-to-face feedback from others, ThinkQuest became the perfect environment for him to share his work. First he used ThinkQuest to complete and post an initial draft of each poem. Then, prior to the revision phase, he solicited online feedback from both his teachers and his peers in a nonthreatening way via his Think page. Outside of the confines of traditional classroom social cues, Brenden's ideas flourished. He completed three drafts of each poem and published with success.

Similarly, Think has helped students with other special needs. Marvin is a seventh grader who receives special education services for a learning disability. He is disorganized, often misplacing important handouts and his jump drive. His Think page has become his virtual binder; he has separate pages for each class and uses them to save as he goes without fear of losing work. Since students decide when a piece is ready to be public, he is free to work on something at his own pace until he feels confident

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.